





# Brian Tu

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 brianptu

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## SKILLS

- **Languages:** Javascript, Typescript, C, C++, Python, Java, GraphQL, HTML/ CSS
- **Technologies:** Node.js, Express.js, Spring Boot, React, Vue.js, Socket.IO, MongoDB, Apollo Server, Docker, Git, Heroku, Figma
- Proficient in object-oriented and functional programming, RESTful APIs, and Full Stack development honed through various projects.

## EXPERIENCE

### Stratus360

May 2021 - Current

Full Stack Developer

- Created **Lighting Web Components** on the **Salesforce Lightning Platform** using Javascript, HTML/CSS on the client-side and **Apex** with embedded **SOQL** queries on the server-side to provide a friendly user interface for 407 ETR to manage data of charges and payments.
- Integrated data received from the SAP API into Salesforce and **unit tested Apex classes** to ensure code coverage upwards of **90%**.
- Developed an application process for FPK Canada using **Salesforce Flow**, NPSP, and Formstack to manage data of **300+ applicants**.
- **Fostered collaborative client relationships**, presented demos to clients, and quickly made revisions based on changing requirements.

### TerraCycle Canada

Jun 2019 - Aug 2019

Automation Developer

- Created a user interface in Excel using VBA to help warehouse workers **automate the creation of custom shipment labels** for products, resulting in **83% less time** needed to create labels.
- Coded a **chrome extension** used by the Director of Operations to download packaging label images from multiple tabs at once to **optimize manual work**.

## PROJECTS

### Qlear

May 2021

Awarded "Best use of DataStax Astra" @ TOHacks 2021

- Produced a web application for creating QR clothing tags to **promote product transparency** for the fashion industry in under 24 hours.
- Built backend using **Spring Boot** and **Apache Cassandra** database (via DataStax Astra) to store clothing product information.
- Designed models for company, tag, and user classes and determined attributes and relationships between object classes.
- Implemented the **REST API** to work seamlessly with the **React Typescript** frontend and deployed the client and server to **AWS**.
- **Quickly grasped new technologies** and **set clear goals** amongst team members to ensure project milestones were achieved.

### Companion

Jan 2021

Awarded Honorable Mention @ nwHacks 2021

- Built a **smart social network** for those in times of hardship to find people to talk to, empowering positive social communication.
- Integrated **sentiment analysis** on messages and **data visualization** of client statistics to cultivate healthy relationships.
- Constructed web app using **Node.js** and **Express.js** with **Firestore** database to track total user intent, messages, and time spent.
- Led the backend development, and created the private and public chats using **Socket.IO** to facilitate realtime chat functionality.
- **Initiated group discussions** to provide and organize ideas for product features as well as **helped team members debug code**.

### Lemons Live

Oct 2020

Awarded Top 30 @ Digital Inclusion Challenge 2020

- Created a **real-time platform for interactive learning**, enabling teachers to engage their students by creating online team competitions.
- Built on a **MongoDB, Express.js, Node.js** stack and Tailwind UI to supply students with an engaging learning experience.
- Developed the **REST API** backend and used **Socket.IO** to integrate online educative games for students and teachers.
- Worked with a team of 6 students and competed against 1000+ students over 30+ countries.
- **Tackled issues in project ideation** and **offered suggestions and feedback** during team brainstorming and discussions.

## EDUCATION

### University of Waterloo

Sep 2020 - Apr 2025

Bachelor of Computer Science, Honours

- **Awards & Academics:** 3.90 GPA (90.0%); President's Scholarship of Distinction
- **Relevant Courses:** Designing Functional Programs (Advanced), Elementary Algorithm Design and Data Abstraction (Advanced)

## INTERESTS

- **(Sports)** soccer, basketball, running; **(Music)** guitar (6+ years) and music production; **(DIY)** guitar and mechanical keyboard